

PRESENTATION FRETWORK DESIGN WITH THIS NUMBER.

# Hobbies

*A. Weekly.  
Journal.*

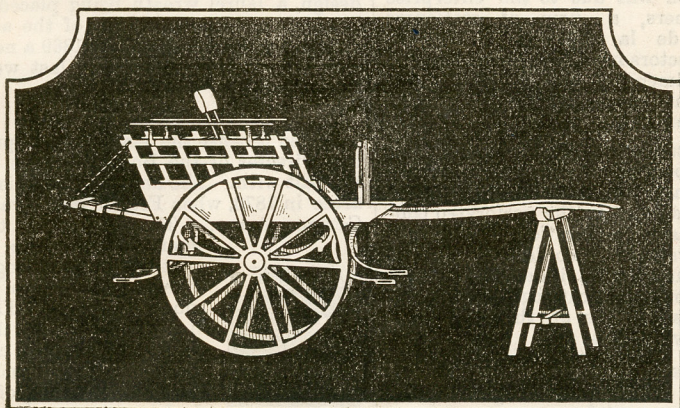
For Amateurs of Both Sexes.

No. 23. VOL. I.

MARCH 21, 1896.

ONE PENNY.

## FRETWORK MODEL OF A POLO CART.



"HOBBIES" PRESENTATION DESIGN, No. 23.

The above is a miniature of the full-sized Design for a Fretwork Model of a Polo Cart, which is given away with each number of this week's issue of "HOBBIES."



# STAMPS

## Week by Week.

*A Philatelic Causerie by* PERCY C. BISHOP,

*Joint Editor of the "STAMP COLLECTORS' FORTNIGHTLY;" Ex-Editor of "THE PHILATELIC JOURNAL" and "PHILATELIC REVIEW OF REVIEWS;" General Secretary of the LONDON PHILATELIC CLUB.*

### A BRIEF STUDY OF FRENCH STAMPS—*Concluded.*

IT was not until 1854 that France had a stamp of so low a denomination as 5 centimes for newspaper postage. In the same year the rates for printed matter were modified considerably, necessitating the creation of stamps of still lower values; but it was not until 1860 that the first of these—the 1c.—actually appeared. Then after the lapse of another three years the stamps of 2c. and 4c. were issued.

#### THE INTRODUCTION OF PERFORATION.

It was at this period in French Philatelic history that the necessity for some ready means of separating stamps one from another began to be keenly felt. The first result of this was the appearance of the "Susse" perforation, which was due to the enterprise of Susse Brothers, a firm of stationers in the Place de la Bourse. I daresay many young collectors have been sorely puzzled on finding specimens of the Empire issues perforated in the large, ungainly "Susse" style, a perforation gauging seven.

Such an important thing as the perforating of postage stamps could not be left long to private enterprise. Towards the end of 1862 French stamps began to appear in the perforated condition. The "Susse" perforations, though unofficial, are universally accorded a place in Philatelists' albums, and, indeed, they are priced in all our principal catalogues at higher rates than the specimens of the same issue perforated by Government.

#### FRENCH REPRINTS.

It will be well at this point to give a brief description of the reprints of early French stamps issued in 1862. These reprints are of an official character, and therefore not to be classed with the trash issued by speculative dealers to deceive young collectors. The 10c., 15c., 20c. (black), 25c., 40c., and 1fr. of the first Republican issue were reprinted, and also the 20c. in the blue colour, though this can perhaps scarcely be called a reprint, since the original was never formally issued to the public. The two stamps of the "Presidency"

issue were also reprinted, and likewise the 25c. and 1fr. stamps of the "Empire" type. "This reprinting (writes Mr. Westoby, one of our leading authorities on the stamps of France) was done in view of the International Exhibition in London of 1862, and also to satisfy requests that had frequently been addressed to the Postmaster-General, as well as the Emperor, for sets of the former issues. Fortunately the reprints can be readily distinguished from the originals, so that no one need be taken in by them. The paper on which they are printed is scarcely, if at all, tinted, as in the originals. The colours are brighter, being for the most part those in use at the time."

At various dates between 1867 and 1870 the various values of the Empire series were altered in design, a laurel wreath being placed upon the brow of Napoleon as a mark of the added glory accruing to the Empire. In 1869 a new value—that of 5 francs, illustrated last week—made its appearance.

#### THE "BORDEAUX" ISSUE,

so called because the stamps were prepared by the Director of the Bordeaux Mint, must next be dealt with. The necessity for this new issue arose in 1870, when France was invaded by the German Army.



The advance of the enemy upon Paris made the precaution of producing an issue of stamps in some other city most necessary. The Republican type, bearing the head of Ceres, was again called into service, the Second Empire being now a thing of the past. I do not propose to deal exhaustively with the Bordeaux issue—that would take a whole copy of *Hobbies* in itself—but shall briefly deal with the 20c. stamp, the most interesting value of the issue. There are three distinct types of this 20c. blue stamp of 1870.

In Type I. the circle of pearls enclosing the head of Ceres is farther from the upper frame of the stamp than the other two types. This type is by far the scarcest of the three.



*Type II.*, besides showing the pearled circle a little nearer the top frame, has better-formed letters than *Type I.*, and the numerals of value are placed wider apart.

In *Type III.* the letters forming the inscriptions are noticeably larger, as also are the numerals of value.

Some three years ago, Mons. Victor Robert, of Paris, claimed to have discovered a fourth type of this 20c. blue of the Bordeaux issue. But Mons. Moens and other high authorities promptly sat upon the idea, and we have heard nothing of late of that fourth type.

The rarest of all the French stamps of the Republican type (excepting, of course, the practically unobtainable 20c. blue of 1849, and the same surcharged "25c.") is

#### A CURIOUS ERROR

—namely, the 15c. printed by mistake in the colours of the 10c., bistre on rose. Only a limited number of this error reached the public, and the stamp, as a consequence, is extremely scarce.



Of the stamps of the current design I need say little. They are all so common as to be obtainable by collectors of the most restricted means. There are fifteen stamps to the complete set, ranging in value from 1c. to 5 francs, but some values—notably the

25c.—have undergone changes of colour. Thus the full number of varieties of the "Commerce and Mercury" stamps chronicled in the latest catalogues is 39.

Next week I shall enter into a few of the most interesting intricacies of the stamps of France, and shall give, not only diagrams of the variations of type of the Bordeaux issue, but also of many other "minor varieties" which cannot be explained without the aid of special illustrations.

—:O:—

It is quite on the cards that some radical change will shortly be made in the method of postmarking stamps by our postal authorities. Mr Henniker Heaton, M.P., our only postal reformer, has discovered that petty frauds are perpetrated by persons who go to the trouble of cutting up lightly-cancelled postage stamps, and joining the unpostmarked parts together to form new stamps. Of course the only perfect remedy for this sort of paltry fraud is to postmark every part of the stamp. Philatelists will pray that this may not be, for what is uglier than a heavily postmarked stamp in a collector's album?

—:O:—

#### NEW ISSUES OF STAMPS.

\*. Items for this department will be gratefully received from any Philatelic readers who happen to receive early information of new issues, or of impending changes in the postal arrangements of any country.

**BRITISH SOUTH AFRICA.**—The Chartered Company's 8d. stamp has appeared in a new colour—maroon.

**CURACAO.**—Somewhat unnecessarily, I should think, the stamps of 10 cents. and 30 cents. have been surcharged "2½ cents." in various styles of type.

**TRANSVAAL.**—In a short time there will be a new issue for the South African Republic. Already the Postmaster-General has received a few advance sheets of 1p. stamps, the value being printed in the national colour—green. This idea will be followed out in every case. Acting in agreement with his colleague in the Cape Colony, the Postmaster-General has decided that the following colours will be henceforth uniformly employed:—½p. green, 1p. lake, 2p. raw sienna, 2½p. blue, 3p. carmine, 4p. yellowish green, 6p. reddish violet, 1s. drab, 2s. 6p. violet, 5s. burnt sienna, 10s. slate, and £5 dark grey. Mr. A. A. Osborn, the Postmaster at Johannesburg, states that the new stamps will not be issued until the present type of stamps are disposed of. As each value runs out the new design will replace it. As regards the 2½p. stamp of the current design, now under order, if they are already through the press they will be issued before the new stamp of this value.

(To be continued.)

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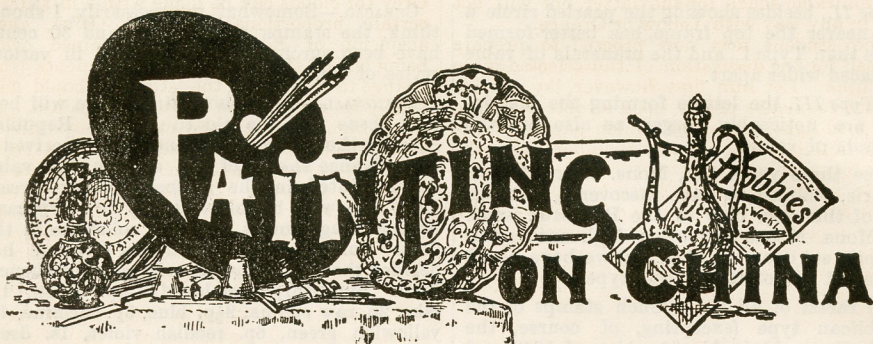
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### CHAP. III.—COLOURS AND THEIR PROPERTIES.



BEFORE giving any suggestions as to the actual painting on China, it may be useful to amateurs to give here a list of the more serviceable colours which are employed.

The following are water or powder colours :—

**AZURE BLUE.**—This colour is of admirable utility in sky painting, and when mixed with grey-black produces effective cloud shadows. Alone it is useful in its lighter tones for the

brighter sky tints, but it will mix agreeably with carmine, pink, and purple, and, as before mentioned, grey-black.

**LIGHT BLUE.**—Useful in landscape as a sky tint, mixed with a little grass green, or for clouds. Admits of admixture with light or deep Azure Blue when depth of tone is required. Its presence is absolutely necessary when neutral tints are to be made.

**SEVRES GREEN.**—This is a transparent green of a warm tone, useful for landscape and flower painting.

**ROSE LEAF GREEN.**—With this useful and beautiful colour both the deep green of the sea in marine scapes and that of the evergreen holly may be produced. It is most important as a landscape green, as mixed with Azure Blue, Brown, Carmine, Purple, or Orange it gives an almost endless variety of useful shades. It may be remarked here that the mixture of blues and yellows, so familiar to the ordinary oil or water colour artist, should be carefully avoided in ceramic painting.

**DOVER GREEN.**—A somewhat similar green to that mentioned above. Useful if combined with yellow for the effect of sunlight upon fading leaves.

**EMERALD GREEN.**—A clear, semi-transparent green of some depth of tone, particularly useful for the leaves of trees.

**WHITE ENAMEL.**—This beautiful white is useful for adding high lights to a finished painting. It must be carefully handled by the amateur, as its improper or over use might spoil the entire picture. It will be found by the novice that it is better to take out the high lights in the first painting rather than to use the Enamel, unless under the personal direction of some experienced teacher.

**GREY BLACK.**—Unlike soft Black, which is also used in ceramic painting, this colour is adapted for using in clouds and for ordinary shading. It is a good shadow tint for colours which do not admit of self-modelling, and will freely mix with Blue Green, Turquoise, and Orange, when, if used in certain proportions, it produces an excellent silver grey useful for many sky tones.

**CARMINE.**—This will be found to be a more useful colour than Rose, as it stands the fire better and is easier to work. It has the advantage of wearing almost the same colour before as after burning, and will commingle with Browns and almost the whole of the Enamel colours. The delicate lines of sunset Pink may be finely produced by this colour used in its fainter washes.

**COMMON PURPLE** is a colour of a little less richness than that known as Royal Purple. It will shade individually, or with nearly all the colours, Scarlet and Green perhaps excepted. For the shading of clouds it is admirable.

**YELLOW.**—There are three Yellows, viz., Light, Persian, and Opaque. The first named is of the nature of water colour Gamboge, and will not mix with Red, Brunswick, or Chocolate Browns. It is useful in its lighter shades. "Persian Yellow Hard" needs what is known in the Potteries as a "hard kiln" fire, but may be used lightly over some other colour. Opaque Yellow is sometimes used instead of Orange.

**OLIVE BROWN** admits of combination with Purple or Black, Carmine, Orange, or Yellow.

**ORANGE.**—Rose colour, Carmine, and Vandyke Brown may all be used with or washed thinly over this colour. Alone it is of admirable brightness, and will shade usefully with Dark Orange. It must be remembered that Orange will turn to a deeper shade in the oven.

**CHOCOLATE BROWN** may be used as a single colour shading itself, or in combination with Brunswick, Purple, Black, or Red. It forms



an admirable shade for the latter, but will not mix in any way with Yellow or Orange.

The student may now proceed to prepare himself for the decoration of the selected piece of China. Let him first, however, lay out his various requisites neatly upon a table standing in a good light, a position which admits of the latter falling across his left shoulder, being the most favourable to good work. The plaque or tile to be painted must next be examined, to make sure that it is dry, and quite free from either grease or dust, as also all brushes, cups, palettes, or other articles to be used in the course of painting. Everything being in a satisfactory condition the design may be sketched in.

Should the student have no facility in drawing, as is, unhappily, often the case, he may have recourse to transfer and tracing paper to gain the same result. It should be used thus:—

Cut a piece of tracing paper sufficiently large to well cover the design intended to be transferred, and placing it carefully over the subject proceed to trace the lines visible through the transparent paper with a good pencil, being mindful to follow the pattern clearly and with intelligence. When the tracing is completed cover the object to be decorated with a piece of red transfer paper, purchasable at 4d. or 5d. a sheet, and lay the outline tracing evenly thereon. The transfer paper need not be cut in the same manner as the tracing paper, as it may be used over and over again without disadvantage. With a sharp pointed brush handle, or the ivory tracer mentioned in the supplementary list of utensils, follow the lines of the tracing, being careful not to unnecessarily break the lines. When the papers are removed a delicate skeleton of the desired picture will be left in red upon the China; this the artist must immediately correct and render intelligible by means of a fine brush and a little Indian Ink. Occasionally there is a difficulty in getting the smooth surface of the China to take the pencil marks. If this be the case it should be wiped over with a linen rag dipped in spirits of turpentine. When dry there will be a delicate film spread over the glossy surface, which will take the pencil or crayon markings most readily. A drop or two of ox gall added to the liquified Indian Ink, it may be stated, will assist it to lay.

Having sketched the desired design upon the surface of the China with Indian Ink, the student may next go on to wash in the sky with the Light Blue mentioned in the list of colours, moistening with either water or a little China medium sold for the purpose. Let him charge his brush well with colour of rather a thin consistency, and sweep it broadly over that portion of the sky to be painted, covering, if necessary, any pencil or ink lines which may be drawn thereon. These, together with the small, light-coloured clouds, which it would be too tedious to avoid in a broad wash, may, when the colour dries, be picked out with a penknife or the sharp handle of a brush. Should the clouds, however, be of good size or any depth of tone, they may be worked into the sky when wet, the brush being washed out and applied to the edges to soften down the hardness which otherwise might remain. A good

Grey for clouds can be made with a mixture, in certain proportions, of Black, Blue, and a suspicion of Pink. This last-named colour, being one of the few overglaze pigments which change in the firing, the student should use it warily in conjunction with other paints. The white high lights on the clouds may either be taken out by means of a soft silk handkerchief wrapped round a finger or pointed stick and dipped in water, or put on in the final painting with a little Enamel White. If the latter method be pursued great care must be taken, as unskilfully laid white looks most unsightly when removed from the kiln.

The sky being washed in—and here it may be remarked that the addition of a little Green to the Blue will sometimes relieve the sky tint—it will now be time to place out the remainder of the colours mentioned below which are not already on the palette, and to paint in the distant objects in the picture. For this last may be used light washes of Sevres Green, shading according to the combination required with either of the Blues, Carmine, Olive Brown, Yellow, and Black. A knowledge of ordinary water colour painting will here help the student to decide the colours and proportions to be used, but it may be taken as a general rule that Greys and Greens will darken and take a colder tone in the firing than may be desired. It is well, therefore, to make these colours warmer and lighter in tone than would be done with ordinary water colours. For the middle distance a choice may be made from Rose Leaf Green, Sevres Green, Dover and Emerald Greens. In this portion of the picture, and also in the more distant objects, sacrifice detail and finish to breadth of touch, rather than niggle these portions of the picture and lose the effect of the foreground work. For an Autumn landscape Rose Leaf Green, used jointly with Purple and Carmine, will be of use in painting the trees. Emerald and Sevres Green used alone give a spring effect. Shade with Olive Brown, Orange, Grey Black, and Purple as required, and work up gradually to the foreground. For this last Rose Leaf Green and Emerald should be used in conjunction with Olive Brown, Yellow, and Orange if painting an Autumnal scene. It may be finished with a little Purple, Carmine, Chocolate, and Grey Black where required. In washing in the foundation colours—and all the first painting, whether of landscape, flower, or figure should be done in washes—the paint must be a good deal thinner than in finishing. The last touches much be sharp and well defined, but these need not be added until after the first firing, when the effect of the work already done may be more readily seen.

(To be continued.)

## BENT IRON WORK.

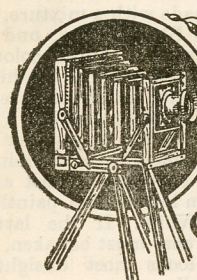
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# PHOTOGRAPHY

## for Amateurs

### NOTES OF THE WEEK.

**W**E understand that whilst Dr. Jameson of South African fame was on board the *Victoria*, the ship's purser (we presume an amateur Photographer) secured a portrait of the Doctor. The negative has, says the *Optician*, been purchased by the London Stereoscopic Company. No doubt the purser has found pleasure and profit through his Photography.

Radiant matter tubes—Crooke's tubes—for the application of the X rays to Shadowgraphy are being now constructed of such patterns as to throw the rays over a larger surface, and so make it possible to work upon larger objects.

The Birmingham Photographic Society's Exhibition will be held from May 4th to 9th. The Judges are to be Rev. F. C. Lambert, Colonel Gale, and T. C. Hepworth.

At the Camera Club the Ross-Hepworth electric lamp has been installed for the Lantern. We understand it is working with very good effect. The inventor, Mr. Cecil Hepworth, is a son of Mr. T. C. Hepworth, F.C.S., who has so long been associated with photographic literature and journalism; the son, who is a young man, proved when quite a boy to be a very clever mechanic, and has been able to bring his hobbies to a useful purpose.

In a recent issue of the *Amateur Photographer* the five errors of a lens are thus described:—

**CHROMATIC ABERRATION.**—Light passing through a lens, *i.e.*, a curved prism, is decomposed into its various constituent colours. These are not all equally refracted and do not therefore all come to a focus at the same point, hence Chromatic Aberration.

**SPHERICAL ABERRATION.**—A beam of parallel rays of light falling upon a curved surface must vary as to the angle which they make with the curved surface; and as the degree of refraction, or bending, partly depends upon this angle, it follows that some rays must be refracted more than others. Hence these rays cannot all meet at the same plane. Thus we have this form of error or aberration.

**ABERRATION OF THICKNESS, OR DISTORTION.**—The rays of light from a straight line, say the edge of a building, passing through a small hole (the stop) will on the first surface of the lens form an approximately straight line; but since the lens is curved, some parts of it will be thicker along this line than are other parts, and also since the degree of refraction or displacement partly depends on the thickness of glass traversed, some parts of the straight line will be bent more than are others. Hence distortion. This may be of two forms, the

barrel or pincushion, according to the position of the stops relative to the lens.

**ROUNDNESS OF FIELD.**—According to the fundamental law of conjugate foci the image of a straight line in a plane perpendicular to the optic axis is not formed as a straight line, but as a slightly curved line. Its curvature, among other things, depends upon the refractive index of the glass, its thickness, its curvature, etc. Thus the image of a flat surface is formed as a curved surface.

**ASTIGMATISM.**—A lens is directed at right angles to the centre of a vertical plane, say a wall. A black cross is distinctly drawn on a sheet of white card; this is placed on the wall opposite the centre of the lens, the arms of the cross being vertical and horizontal, and carefully focussed. Keeping the arms vertical and horizontal, it is now moved so as to come only just within the corner lines of the ground glass. It will now be found that we cannot get the vertical and horizontal arms in focus at the same time. Each arm can be focussed tolerably distinctly, one at a time, but not both together. The cause of this is not easy to make clear without a diagram, but roughly, one may say it is largely a question of the angle of oblique incident rays. The rays coming from the horizontal line fall upon the surface of the lens at a different set of angles to those made by the rays from the vertical line, and hence one set are more sharply defined in one plane and the other set in another.

These are the five principal errors, one other may be named—**GLARE SPOT.** This is not properly a defect in the lens, but is a phenomenon which may or may not happen according to the conditions and surroundings of the lens. We have given these "errors" in order that those who desire it may themselves test their lenses.

A well-known writer recently contributed an article to one of the photographic journals under the title—"Can the Camera See?" This surely is an absurdity; the lens is the eye in Photography, and the camera a mere box.

Meteorological Photography is a particularly fascinating branch of the science. Almost any camera and lens may be used, and we should recommend the use of Isochromatic plates and a yellow screen. We have before referred to Mr. Inward's book upon clouds. A perusal of it would be of great service to those who are intent upon Cloud Photography.

Mr. Wm. Thomas, of Herne Hill, is very busy lecturing on "Artistic Work with the Hand Camera." He is a clever artist, an excellent Photographer, and a good speaker. Much may be learnt in a short time spent in his company.



If readers of *Hobbies* get a chance of hearing him let them embrace it. We are glad to find that Mr. Thomas has no particular liking for the "Snapper" who wastes plates at the seaside, who often causes much annoyance, and whose vagaries have done much to give the hand camera a bad name.

The following few lines are worth more than a passing thought:—Through Photography, and reproductive processes dependent upon it, copies of good pictures have been multiplied, and the public eye and taste are being educated to a degree which without such aid would be impossible; and there is no doubt that on the side of good draughtsmanship art has profited by comparison of her lines with the accurate tracings of the sun. Photography, on the other hand, is wholly indebted to the older art for there being any such thing as making pictures, and for all the ideas of structure or composition that go into them. She should not, because of her unsurpassable accuracy of delineation, disdain to learn of her big sister all she can, so that eventually her name cannot be used as a reproach to hard and dry productions of paint-craft.

An organisation has been established called the Electrophone Company. An entertainment was recently given at which a number of ladies and gentlemen, seated comfortably in the offices of the Company, listened to a lecture being delivered some miles away, and saw the same pictures. This was accomplished by a duplicate set of slides which were changed at the same moment in both places, the lecture being transmitted by Electrophone, each chair being provided with a receiver for the occupant.

In the list of awards just to hand of the Eighth Annual International Photographic Exhibition, held at Calcutta under the auspices of the Photographic Society of India, it is interesting to note the names of several prominent English workers. We notice a gold medal, presented by the H.H. Maharajah Scindia, is awarded to Mr. J. A. Sinclair, and that silver medals are gained by Messrs. R. J. Fry, J. H. Gear, Charles Job, R. Keene, T. M. Brownrigg, Edgar G. Lee, Dr. Hall Edwards, &c. There are many other awards, but these will be sufficient to show that the mother country can still hold her own against all comers in Photography.

In a little book by Mr. F. B. Taylor, published in Calcutta, entitled "Notes on Photography for a Beginner," the following note attracted our attention, as we are so completely at one with the author:—"Stick to one, or at most two kinds of plate or developer; thoroughly master the use of these and do not try every new formula you may see advertised or recommended." This note should be always prominently kept in view.

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## HOBBIES' SUPPLY DEPARTMENT

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### THE MERITS OF THE SCHEME.

—:o:—

**I**N numbers 20 and 21 of *Hobbies* we gave full particulars of the establishment of our Supply Department, and we are pleased to say that a large number of readers are already availing themselves of our offer to obtain and forward to them any articles of which they may be in need. Any reader who does not fully understand the nature of our plan will do well to carefully read the clear explanations given in the numbers of *Hobbies* published on February 29th and March 7th. The advantages we offer may be briefly summarised in the following paragraph from the second of the two articles we have already published:—We place at the disposal of every reader of *Hobbies* the best possible advice on all subjects coming within the scope of the paper. He has also at his service the independent judgment of a practical business man upon any article which he may wish to buy, and, if he desires, such article will be bought for him in the cheapest market and sent securely packed to any address. He is offered these advantages not only absolutely free of charge, but by the operation of the *Hobbies'* Coupon scheme he will actually obtain the goods at a lower price than he could buy them for himself. Moreover, in many instances part of the purchase money he has paid will be refunded, for he will be entitled to a share of the special discount which our large transactions will often enable us to obtain. We cordially invite every reader who wishes to take advantage of our new scheme, or who may have any suggestions to make on the subject, to write to—The Manager, "*Hobbies'* Supply Department," Bouverie House, Salisbury Square, London, E.C.



# My Bird-Room,

*By a Fellow of the Zoological Society.*

HERE are few prettier sights than a well-kept Bird Room, and few worse sights than a badly kept one. As an aviarist of many years' experience I have seen both kinds, and must frankly confess that there is nothing which annoys me more than to see a collection of dirty cages, which are evidently cleaned out only at rare intervals, inhabited by a few miserable feathered creatures, unkempt and uncared for; but, on the other hand, who has not gazed with pleasure on an aviary of birds that shews the owner's care and thoughtfulness, by its well-filled food and drinking tins, its evenly-sanded floor and its general cleanliness, as well as by the beautiful condition of its inmates?

I will endeavour to describe one of my bird-rooms, so that possibly some may be tempted to go and do likewise. I selected a room with a south-westerly aspect, and covered the floor with very stout linen. This was to prevent the sand from falling between the boards. A considerable quantity of sand and gravel, plentifully mixed with broken oyster shells, was strewn upon the floor. Twigs and small branches were fixed to the walls in such a manner that they projected into the room, thus affording nesting accommodation for the inmates. For some of the birds, that nested only in holes, cocoanut husks were provided, while for larger birds, small barrels with sawdust inside were hung up in places. The seed was placed in a tray which hung from the ceiling by a hook, whilst the drinking water was placed on the ground. Some of my friends have the water arrangements made in the form of a fountain, which gives a picturesque appearance and a sense of refreshing coolness to the place. The window frames of the room were covered with half-inch galvanized wire netting, placed in such a manner that the windows could be opened and shut for the purpose of giving fresh air to the place. After this had been done all was ready for the reception of the inmates.

Nearly the whole of my collection at that time was of foreign birds, so that the room was alive with all the colours of the rainbow. Of course for the first few weeks the birds were rather shy and used to get underneath the branches out of sight if anyone entered the room, but after a time they got used to the place and settled down in peace and quietness. In a very short time some Budgerigars began to prepare a cocoanut husk, and not long after began laying. After about a month had elapsed five young birds made their appearance. This was repeated several times until the value of my stock greatly exceeded my initial outlay and subsequent expenses. The majority of the birds in this particular room consisted of the smaller varieties of Parrakeets; but there were, for some little time, some foreign Finches and one or two British birds. The temperature of the room was not artificially regulated by any means whatever, and averaged 60° F. During the winter seasons I have had the water frozen

in the tins, and have had to break the ice before the birds could get anything to drink. Foreign birds are very hardy; in fact, some of them can outlast a good many English birds during the cold weather. The thing that they and all other birds cannot stand is draught, and I have lost more birds from this latter cause than from all other ailments put together.

Budgerigars are now very cheap. When I first became an aviarist they cost about 30/- per pair, but now they can anywhere be obtained for 10/6. They are remarkably hardy birds and require only ordinary attention. The best food for them is millet seed, and it is always the cheapest plan in the end to purchase the finest quality. The difference of sex is easily distinguished, as the cere or bare skin just above the beak is bright blue in the male, and light brown in the female bird. These birds are the same that may be seen in the cages of the itinerant Italian fortune-teller, where, on payment of a penny, one of the birds comes down from the perch, thrusts its head through an aperture in the wires into a box containing several folded papers, one of which it abstracts and drops into the attendant's hand, who gives it to you with servile wishes for your future happiness.

Some of the smaller foreign birds can be obtained for very little expense. Java Sparrows are very pretty birds, the body being slate-coloured, or perhaps the better description would be dark French grey. The head is very dark blue, with white cheeks, the tail and large wing-feathers being the same colour as the head. These birds cost 2/6 per pair and are quite contented with ordinary canary seed, with occasionally a little millet given by way of a change. Then Weavers, Avadavats, and Singing Finches only cost about 3/6 to 5/- per pair, so that anyone with a little spare cash can easily set up a bird-room, provided he has an apartment for which there is no other use. Millet and canary seed form the staple food of nearly all the small foreign birds. It is a very good plan to place a large meat dish on the floor filled with water, so that if the birds require a bath they may have the opportunity of taking one. A bath visibly refreshes the birds, and they always seem brighter after having one.

The door of the room should have a loose hanging curtain outside, so that if any of the inmates made a sudden dash for liberty they are prevented by means of this arrangement. It is not advisable to enter the room after darkness has set in, except in cases of imperative necessity, as the birds are easily frightened at night and dash all round the room, knocking against the walls and sometimes fatally injuring themselves.

Such a room as I have described, when well-kept, may be made a source of profit as well as pleasure. In fact, several friends of mine make a considerable income in the course of a year from keeping and breeding foreign birds. Of course, for making a "paying hobby" by means of foreign birds, there is nothing like having a large out-door aviary. I have had both, and think that, except for the more delicate birds, the indoor room must take second place to the garden aviary. But the latter cannot be described in the course of a single article, so it must be left over for a later opportunity.



# HOW TO RIDE A BICYCLE.

A pastime but not a plaything.

**W**HEN the *World* asked, "Will the bike last?" most people laughed at the very absurdity of the question. You might as well ask, said some of them, whether railways, or football, or cricket would last, and, when you come to think of it, cycling, though the *World* may not recognise the fact, is far more stable than either of the two great national pastimes I have named. It is so because it is so many-sided. Football and cricket are hobbies, so is cycling, but cycling is more. As a hobby it is equal to football or cricket, but there is a sporting and also a very important commercial side to cycling, which the two games do not touch at all.

Cycling, regarded purely as a sport—that is, cycle racing—may die, but the bicycle which has become the time-saver must live. But useful as the cycle is, regarded merely as a locomotive agent, I am bound to think that it is as a recreative agent that its value is the greatest. In asking whether the bike will last, the *World* should have explained that it meant, will the bike as a fashionable plaything last? I am decidedly of opinion that it will not. I think the majority of the people one sees on the wheel in Hyde Park do not care one straw for the riding; they cycle, not for the pleasure that is to be derived from the wheel, otherwise they would not confine themselves to such very poor and unsatisfactory cycling as the Park affords, but simply because cycling is "The thing,"—the fashion of the hour.

The *World* considers that cycling has proved its value by its having secured a place as a fashionable amusement. Nothing could be more incorrect. Cycling would be just as sound as a permanent institution if it had been confined by law to persons with an income of less than £500 a year. Cycling is a recreation, and it is as a recreation and not as a plaything that it will stand. Although many of the Hyde Park people do not enjoy their bicycling (I think the faces and general air of discomfort which some of them wear fully prove this), I am, of course, quite aware that a percentage do appreciate the wheel most thoroughly. These, I take it, will not trouble the Park very much so soon as dry roads and fine weather can be more depended upon; they will be out in the country enjoying, as perhaps only the cyclist can enjoy, that perfect independence and freedom which are derived from absence of need of attention, coupled with the high locomotive value of the wheel. It is in cycling of this sort that the great charm of the wheel undoubtedly lies. Cycle racing is grand and exciting sport. Long-distance road rides have something about them, however inexplicable it may be to some minds, which is wonderfully attractive; but, after all, the real pleasure lies in quiet country rides, in independent wanderings through the leafy lanes and

picturesque rural scenery of England, to say nothing of the more striking and sometimes wilder charms of Wales and Scotland.

I think it is necessary at such a time as the present to direct attention to these matters. Most cycling papers are filled from cover to cover with disputes on questions of rules and definitions, with racing gossip, with details of records, and with trade advertisements and trade puffs. Daily papers, which have recently taken up cycling matters, follow to a large extent in the same footsteps, but of the practical recreative value of cycling we read and hear little. Possibly there is not so very much to be said week after week upon such a topic, but the fact remains that the very backbone of cycling is here.

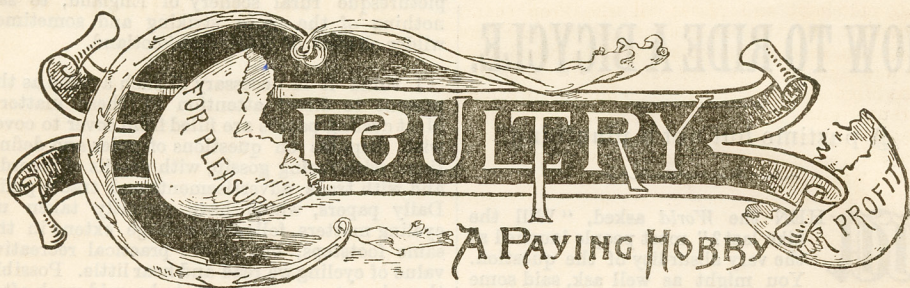
Racing is all right in its way, but at best a man can only race for a few years of his life, and although I have raced myself, I most unhesitatingly pronounce in favour of the gentler branch of the pastime. Still a young rider who has strength should not despise speed. Racing and fast riding have done wonders for our machines. Competition to get records has been a wonderful incentive to cycle building, and the perfection of the modern machine is almost wholly due to racing. Apart from this, I think every young cyclist should practice speed work a little. It will help him in his ordinary riding, and make him ride easier and better. Novices should, however, be careful never to attempt any pace until they are quite at home on their machines and have full control over the steering. Young riders should also be specially careful to avoid taking down gradients at high speed.

All early attempts at pace should be made on the level on a wide, straight, dry road. Most fatal accidents are caused by novices losing control down steep hills. For this cause every rider, who is not an expert, should have a brake on his machine, and here it is important to note that the ordinary front wheel brake is very liable to get out of order. The little set screw that fixes the sliding rod sometimes becomes loose, and the result is that when the brake is applied the rod slips up and no pressure worth anything reaches the tyre. Should a novice find himself on a steep hill with his brake in a condition of this sort he may be in a very nasty fix. The retarding capabilities of one's brake should be frequently tested, and when a hill known to be dangerous to the inexperienced is reached the brake should be applied sooner than it is needed, and when the machine is moving quite slowly, in order that a dismount may be instantly made should anything be wrong.

Another danger novices may be unaware of is unexpected grease. There is often a patch of sheltered road at the bottom of a steep, and, perhaps, winding hill, where the moisture will not dry so quickly as it does on the exposed surface of the hill itself. Such a grease patch may be safe enough if there is no bend in the road, but when a corner has to be taken at any speed side slip is much more to be feared. A novice should never let fly even on a safe hill unless he is sure there is no cross road, no possible stoppage on the road he is on, and no grease in the hollow at the bottom.

(To be continued.)





## CHAP. II.—LAYING BREEDS.

**T**HE chief object of these articles is to excite the interest of readers and to induce them to take up Poultry Keeping as a hobby. It is undoubtedly true that if all householders who have a little space at their command would but keep a few fowls, taking advantage of the knowledge possessed by experienced poultry keepers of the requirements and laying propensities of the various breeds of fowls, a check would be imposed upon the gigantic importation of eggs into this country, and thousands of pounds annually passing into the hands of foreigners would be kept at home. The "few fowls" referred to would also convert the odds and ends usually thrown away into nourishing food.

Say that a hen lays *only* 100 eggs per annum, and place the average price at 1½d. each all the year round, and for new-laid eggs this estimate is about correct. Now, the hen would produce eggs of the value of 12/6, out of which the cost of her keep must be deducted. From experience, this may be placed at 1½d. per week. It would certainly not exceed 6/6 for the year. Thus, besides the pleasure derived from keeping poultry and the great advantage of having undoubtedly new-laid eggs for the home table, a very handsome profit is shown to the owner. All sorts of hens lay eggs, but some are more prolific than others, and again, some fowls are regular layers, and it is from the latter that the man who wants plenty of eggs must breed. Even amongst the same kind of fowls some will be found laying almost daily, week after week and month after month, whilst others of the same breed will lay but twice a week. Now, the first-mentioned are a good "laying strain," and just the sort for readers of *Hobbies* who want eggs for their breakfast every morning.

Of all good laying breeds Minorcas (Black or White), Leghorns (any colour), and Hamburgs (Self-colour or Spangled) unquestionably head the list, and may be termed "everlasting layers." Whether kept pure or crossed with other breeds they scarcely ever fail to be equally prolific. The two former breeds stand confinement well, being what is commonly known as "backyard fowls."

Where quantity and weight of eggs are required the Minorca may safely claim to hold the palm, and readers are strongly urged to take up this very useful variety. They may be described as non-sitters and layers of large pure white eggs. They are, moreover, but small eaters. The flesh is of fine flavour and very white. Although the Minorca cannot be classed as a table fowl, its influence is very strong when a cross with a heavier breed is made, the Indian Game cross producing good-fleshed birds. One of the good features of the breed is its activity. When allowed their liberty the birds will almost keep themselves, although they stand confinement equally well if care be taken not to overfeed them. These birds are also easy to rear, and now is the best time to purchase a sitting of eggs from a reliable strain. The chickens are very hardy, easily reared, breed true and fledge well. Just a word may be said as to the principal points of excellence of the Minorca, justly described as one of the finest combination of utility and beauty in the whole category of poultry. The plumage is glossy black, but not of the greenish tint required for some breeds. In the cock the comb is to be one of the principal ornaments of the Minorca, and must be large, erect and stiff, and have about seven even spikes. Whilst having a pure red face, the lobes each side must be snowy white, oval, large, long and smooth. The body should be squarish in shape and inclined to be large. The bird ought to be upright in carriage, and have a good length of thigh. The hens have a gracefully drooping comb over the side of the face, and are of a more squarish build, with long back, deep keel, and low stern. The two latter points are indicative of good laying qualities. The cocks weigh about 7 lbs., and the hens 5 to 6 lbs.

The Leghorn breed was introduced into England from Leghorn in 1870, it being the typical fowl of Italy. They are bred in all colours—brown, buff, white, black, cuckoo, pile, and even duckwing, but the brown we recommend on account of their lovely plumage and extreme hardness. This breed, it will be observed, are similar to the Minorca, but the birds are shorter in the legs. They have all the good qualities of the Minorca, and are stated by some breeders to be even more prolific. The writer has had White Leghorn pullets laying at



five months old. They are the mainstay of the egg merchant and please all who keep them, whether in confinement or otherwise. The Leghorn, in fact, will make itself at home anywhere, and soon fill the egg basket, being like the Minorca a non-sitter. The birds have bright orange yellow beaks and legs, and are useless for table purposes on account of their poor feeding capacity and small frame. They lay a good sized white egg, and will thrive under any ordinary circumstances, being very hardy. Crossed with Houdans, Plymouth Rocks, or Orpingtons they do well. From the Leghorn we may pass to another splendid breed for laying purposes, viz., the Hamburg, a smart, active little bird which, however, does not stand confinement. Hamburgs must have their liberty, and then from the age of five months they lay, with a short interval for moulting, almost every day in the year. They are non-sitters, and lay a small white egg. For the farmer and those with good grass runs they will succeed well, as will also the Andalusian, another noted laying breed, nearly equal to the Leghorn or Minorca. They are pretty in colour, having a nice slatey blue, each feather being edged with a black border. They lay wonderfully large white eggs, and may be very strongly recommended.

(To be continued.)

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## Items of Interest.

### UNIVERSITY STUDENTS

By comparing the statistics of English and Scotch universities in a given year it was found that Scotland, with a population of 3,725,000, had 6,500 university students, while England had only 6,000 students out of a population about six times as great.

### A ROYAL HOBBY.

When the Princess of Wales was married the King of the Belgians gave her lace of the value of £10,000. From that time the princess has gone on collecting, and now her collection is worth something like £50,000.

### IMITATION GUTTA PERCHA.

A good substitute for gutta-percha is said to be prepared as follows:—Tar, one part; paraffine, ten parts, dissolve together at 120 deg., and then add caoutchouc, two parts. Keep at this temperature until a homogeneous mass results. — *London Electrical Engineer*.

### HOW TO TRANSFER LEAVES.

To transfer the outline and tint of a leaf, take the leaf and place over a small piece of white linen soaked in spirits of nitre and insert between the leaves of a heavy book with a sheet of paper to receive the impression, lay the book away for a few days, and the leaf will then be transferred, colour and form, to the paper.

### OUR COIN SUPPLY.

The supply of coin and bullion in the Bank of England continues at phenomenal limits, being nearly 11½ millions increase for the year, the reserve being also nearly as much in excess of last year's figure. The accumulation of deposits in the bank, amounting to £60,700,000 exceeds by 19 millions the amount in 1895. With such reserves there does not appear to be much prospect of an improvement in the bank rate, which has now for the unprecedented period of 23 months, from 22nd February, 1894, continued at 2 per cent.

### THE CHAMELEON.

The colours of the chameleon do not change instantaneously, but require a considerable length of time. The change is a provision of nature for the protection of a helpless animal from innumerable enemies.

### PLANTS AND COLOURED GLASS.

Camille Flammarion has found that plants grow higher under red than green or blue glass. M. Armand Gautier has observed that vegetables grow better under red than yellow or violet light, and that they died under green light. Pots of flowers traversed by the electric current from three Bunsen cells for 24 months gave far more vigorous plants than similar pots not electrified.

### PNEUMATIC RAILWAY SEATS.

An invention provides for pneumatic seats in railway carriages. These may be readily inflated by means of a hose connected with the pipes of the air-brake. In this manner may travelling be made a luxury at a small permanent cost to the railway companies.

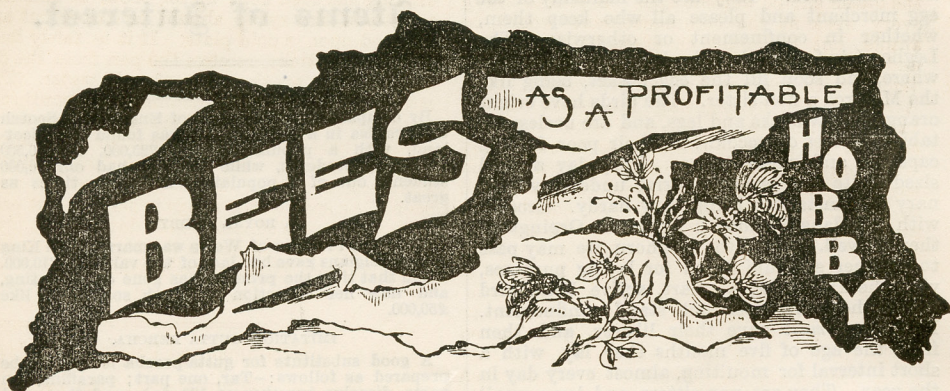
### THE FRACTION OF A PENNY.

It is the custom of the Bank of England not to pay fractions of a penny. In the case of dividends on Government stock, these fractions have in the course of years amounted to £140,000, which amount, it is stated, was a few years ago paid over to the Chancellor of the Exchequer.

### THE COST OF LOCOMOTIVES.

The average price of a railway engine is about 3½d. per lb. all round. Considering that a locomotive consists of upwards of 5,000 pieces, which, in Robert Stephenson's phrase, "must be put together as carefully as a watch," it cannot be denied that the price is strictly reasonable.

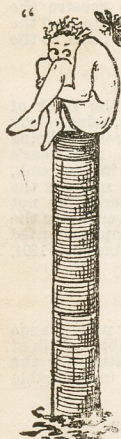




By C. N. WHITE,

*First Class Certificated Expert of the British Bee-Keepers' Association.*

## CHAP. VI.—FEEDING AND FOODS.



"Bees cannot gather enough to keep themselves after I take off the supers they may starve," is a remark which is frequently heard when feeding has been advised. Such people are not bee keepers, they do not use either reason or common sense. Now, inasmuch as those who read these articles for guidance are, in the main, hobbyists whose real desire is to make their hobbies both interesting and profitable, there can be no doubt whatever that after reading this article they will be impressed with the importance of feeding as a powerful lever to success in the apiary. Bees are fed for two reasons, either to save them from starving, usually in the winter or early spring, which seldom happens in a well-managed apiary; or to urge on the egg-laying of the queen, in order that the hive may be crowded with worker bees, both early in the season in readiness for the honey-flow, and later in the season to raise bees for wintering.

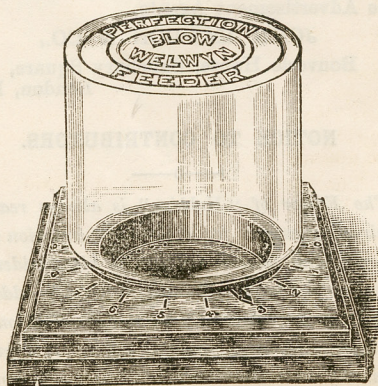
### DRY SUGAR FEEDING.

Presuming that a stock has been properly wintered, the progress in the brood chamber may be satisfactory, but in all probability at the normal rate of increase the stock will be at its greatest strength about the middle or towards the end of the honey-flow; whereas, by judicious feeding early in the year, the number of eggs laid daily may be much increased, so that the greatest strength of the colony may be obtained at the commencement of the honey-flow, when the greatest army of workers is most required. One great objection to feeding, which, however, has little weight with a man of business, is the trouble it entails, but, by adopting what is termed dry sugar feeding, the trouble and mess inseparable from syrup feeding are reduced to a minimum, while being equally effective. The only sugar that is suitable for

this method of feeding is *Porto Rico*, a fine-grained, pure cane, moist sugar, and it is given in such a manner that it will absorb the moisture of the atmosphere inside the hive. It may be placed in a basin upon a board in which two or three small holes are bored, and then set over the feed hole of any kind of hive; or it may be put into a dummy feeder and placed at the side of the brood nest. In either case the bees are enabled, by the sugar absorbing the moisture, to take a slow but continuous supply of food. While food is thus being carried into the brood nest, breeding is accelerated, particularly if the brood nest is kept compact and warm. By keeping the brood nest compact, I mean that the bees should only be allowed as many frames as they can fairly cover, for if a stock is allowed more frames than are needed, there is a circulation of cold air around the brood nest which retards progress.

### SYRUP FEEDING.

The same effect in stimulating to brood rearing is obtained by giving syrup, though only when it is given in moderate quantities at a time, otherwise it is at once taken down and stored in the cells where we are anxious that



GRADUATED FEEDER.



the queen should deposit eggs. A pint of syrup every week at the commencement would be ample, but it should be given in the evening and warm. In order to regulate the supply, feeders with graduated stages are used. Then it is possible, by pointing the index to the various numbers, to allow a slow or rapid supply. By allowing the food to be taken, say from only two holes, a bottle-full would last several days. This arrangement is all very well in ensuring a slow but continuous supply, but, as all taken down after the first few hours must be cold, I am entirely opposed to limiting the time of taking the syrup down. If a pint is required for four or five days, there is no objection, but a great advantage in allowing it to be taken down in a few hours, for then it is stored while warm around the brood nest, and is kept at a convenient temperature for use when wanted. Syrup is made by melting sugar in water in the proportion of six pounds of sugar to a quart of water for autumn food, and half the quantity of sugar for spring food. The reason for this difference is that in spring the bees carry into the hive water to dilute the honey in preparing food for themselves and the grubs, and if the syrup is not sufficiently thin much carrying of water by the bees is necessitated. In the autumn when we are preparing our stocks for winter, and find that they require additional stores to make them safe until the spring flowers are in bloom, the syrup we then give must be thicker, otherwise we again add to the work of the bees. When honey, or nectar as it is then called, is culled from the nectaries of the flowers, it is very thin, and is put by the bees into all available cells, so as to expose it as much as possible to the heat generated by the bees in the hive, and thus ripen it by the excess of water it contains being taken out by evaporation. Similarly, if thin food is given in the autumn it must be ripened before it can be sealed over, but this work is rendered more difficult at that season, as the weather is cooler and the bees are decreasing in numbers.

#### AUTUMN FEEDING.

As soon as the honey-flow is at an end egg laying gradually ceases, but in order to induce the queen to continue her work we must give again the dry sugar feeder. Then, by replenishing the supply as needed, breeding will be continued to the middle of September, when, if any more food is required for winter use, it must be given quickly in the form of syrup. No stock should be considered safe unless the sealed stores weigh at least 20 lbs. It is always best to allow more than will be absolutely necessary, because, with movable comb hives, any stock with a superabundant supply in the spring may be robbed of a comb of honey to give to a needy neighbour.

There is still one other kind of food—

#### CANDY,

which is of great value. It is made as follows:—Put into a brass pan 7 lbs. of cane loaf or crystallised sugar and  $\frac{1}{2}$  oz. of cream of tartar, and add  $1\frac{1}{2}$  pints of boiling water. Stand it by the side of the fire and stir until the sugar is melted; then place the pan over a brisk fire, bring the contents to the boil, and continue stirring to prevent burning, because burnt sugar is an objectionable food for bees. After the

stirring has been kept up for about 10 minutes, a little of the syrup should be taken out and dropped upon a cold plate. If it is fairly hard and not too sticky, remove the pan from the fire and set it in another pan of cold water. The stirring must then be resumed and continued until the mass becomes thick and creamy. It is then done, and should be poured upon sheets of paper spread over soup or ordinary dinner plates, about  $1\frac{1}{2}$  or 2 lbs. being poured upon each. As soon as the candy is set, but not cold, it should be placed, candy side downwards, upon the frames; the paper on the top will thus protect the quilts from becoming sticky.

(To be continued).

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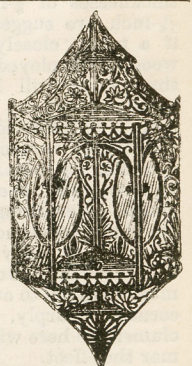
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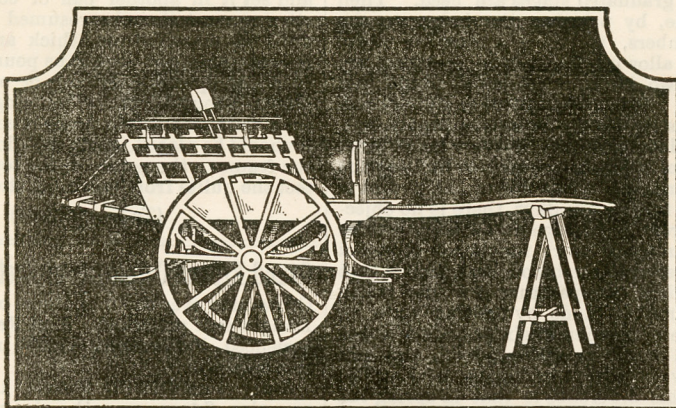
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# Our Weekly Presentation Design.



No. 23.—MODEL OF POLO CART.

**O**UR TWENTY-THIRD Presentation Design represents the Model of a Polo Cart. This can hardly be called a Fretwork Pattern, but certainly the easiest method of making it is by using the ordinary Fretsaw.

If two varieties of wood are used, Pencil Cedar and White, or Satinwood and White, might be suggested. A coloured body and white wheels, or *vice versa*, would look equally well. Woods with a strongly-marked grain, such as Oak, Bird's Eye Maple, Plane Tree, etc., should be avoided, as they tend to give a coarse appearance to a light article. On the Pattern sheet, thicknesses of  $\frac{1}{8}$ -inch and  $\frac{3}{16}$ -inch are suggested, but if a tough, closely-grained wood is employed,  $\frac{1}{8}$ -inch throughout will be sufficiently strong.

As it is intended to have the Model as accurate as possible, no ornament of any sort has been introduced. Everything is plain, but the article is not by any means more easily made on that account. Great care must be taken to cut all the corners sharply, as any clumsiness here will utterly mar the effect.

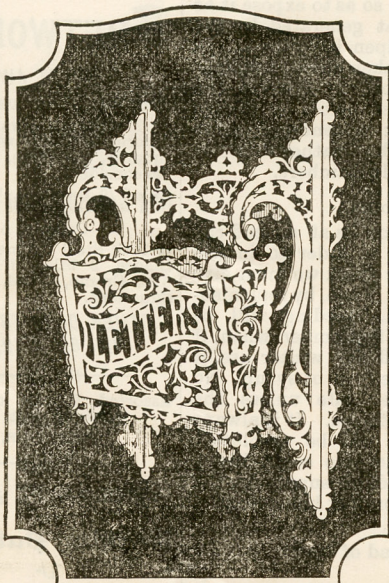
In the work of sawing out all is plain sailing; it is only with the fitting together that some extra care and patience are required. There are no real difficulties to face, but neatness and accuracy are necessary. The sides should be fixed to the bottom by glue and pins. Ordinary pins may be used; break them off at about  $\frac{3}{8}$ -inch from the point and drive

home as if they were nails. They are slight, but they hold firmly and have the special advantage of possessing no *heads*, which are always an eyesore. The back is fixed on with a pin hinge, as shewn in the miniature. In this case the pins must be stouter and longer, as they are called upon to bear some strain. Common brass hinges might be used, but they do not look so well. This back should be held in position (when folded down) by two pieces of gilt or silk cord to represent chains.

The wheels, of course, must be made to revolve. The simplest method is by passing a long wire nail through the wheel and washers and into the axle. Those who prefer it could make a turned axle, and have the wheels permanently fixed to it. This would necessitate circular instead of square holes being cut in the "springs," so that the round axle might revolve within them. Washers should be fixed both on the inside and outside of the wheels to steady them. They may be glued to the wheels or left free, according to the worker's preference.

Some trimming up afterwards with the penknife and file will be necessary. The shafts, for instance, should be rounded, and some other parts touched up. Small

hooks, toy lamps, and other sundries may be fixed on to make the Model more complete. It has only been our aim to give the general Design, and to leave all extra details to the amateur himself. There is hardly any limit to the elaboration which the Cart could receive.



No. 24.—SWING LETTER HOLDER.\*

\* This Pattern will be presented with next week's "Hobbies."



# OUR February Photographic Competition.

## THE PRIZE AWARDS.

**T**HE number is much larger, and much of the work in a difficult subject, "Groups, Portraits and Animals," is very good; we only regret that the calls upon our space will not permit a lengthy notice, or the reproduction of a larger number of Photographs. We give the Prize Print and the *Curio* of the competition. This latter is the work of Mr. C. G. Dodson. It will, no doubt, raise the question, "How was it done?" and we must leave it to Mr. Dodson to explain in some future number of *Hobbies*.

First Prize—(TEN SHILLINGS), F. M. THOMSON, 22, Avenue Road, Southampton, for "A Garden Portrait."

Second Prize—(FIVE SHILLINGS), J. H. MILLER, 42, George Street, Grantham, for "Group of Grantham Photographers."

Hon. Mention—JAMES A. GEE, "Expectation;" ROGER DUFF, "Portrait;" WALTER R. BRIGHTMAN, "Sheep."

We reproduce the First Prize Photograph, a most excellent portrait study, taken in the open air and entirely untouched. This subject is carefully lighted, and for background Mr. Thomson has used brown paper.

Mr. Miller has been most successful in his Group of Grantham Photographers. They are standing or sitting on the terrace steps of Harlaxton Hall, and number in all nine knights of the Camera, varying from the grey-haired veteran of sixty or seventy to the boy from school. Mr. Miller is no novice with his Camera.

Mr. Gee sends a Photograph of two impudent puppies—fox terriers—that cover the little "Expectation" perfectly. The chair upon which they are resting is slightly out of focus, but the dogs are true to life, and without the least sign of movement.

Mr. Duff has been most successful in his Portrait of a girl about "Bashful Fifteen."

Mr. Brightman sends a delightful study of "Sheep." He is to be congratulated upon the admirable lighting, but the picture would be

much improved by a larger mount, and one that is carefully cut. Margin is worth much with small Photographs, and green is not a happy tint.

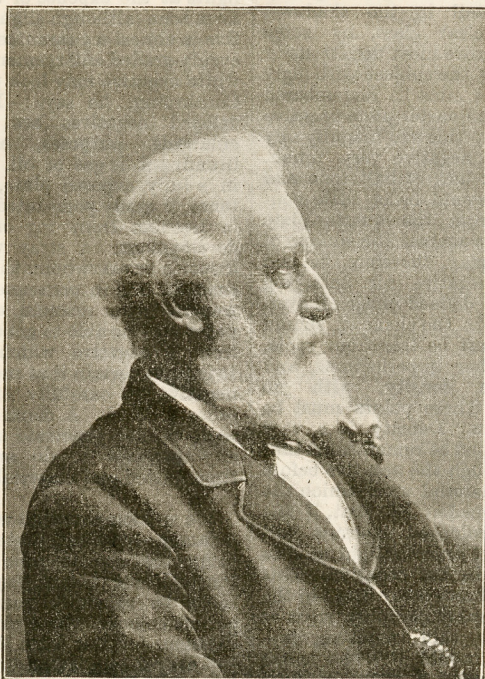
We reproduce the *Curio*, and in this connection we should mention that another Photograph, "I've got him," by Mr. W. Herbert, though poor in execution, is splendid in subject.

A youngster about four years old, in the early morning, has picked up "pussy," and so good is the Portrait that it requires only to look a second and you can almost hear the cat "miaow." Another Photograph by Herbert Robesan, aged fourteen years, of a cow in the farm yard is a wonderful example of what a boy can do in Photography.

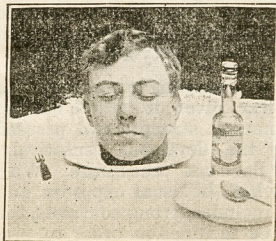
We have been able to rank a large number of Photographs First-Class, and notably:—Portraits by H. H. Heeley, C. Moreland, A. S. Pye, A. W. Allinson; Animals:—H. S. Pockson and Samuel Moore; Groups, Miss Ethel Cooper. This picture is certainly the second best group. Six "Ancient Mariners" are seated outside the coast-guard station at Alde-

burgh, Suffolk. These veterans total four hundred and eighty five years, as their united pilgrimage on earth, the oldest being eighty-four, and the youngest a gay spark of seventy-six summers.

We hope there will be even a larger number sent in for the March competition, "Landscape and Seascape." All Photographs are due on March 31st. Particulars, as usual, will be found in our Prize Competition page.



"A GARDEN PORTRAIT."



"THE CURIO."



## How to make Photographic Enlargements.

### CHAPTER II.—THE NEGATIVE.

**U**NLESS the negative is a good one, it is quite certain that the enlargement will be a failure. For purposes of enlargement a negative should have no harsh contrasts, but a clean, sharp, well defined image with plenty of detail in the shadows.

The clear glass, by some prized in negatives, will prove most disastrous in the enlargement, spoiling the subject with ugly patches of solid black. It must be remembered that we are going to take a quarter-plate negative and enlarge up to 10 by 8; this will magnify any defects in the original negative very much. Defective composition or lack of half tone and detail in shadows that would be of little consequence in a print from the quarter-plate negative will all be factors against the success of the enlarged print. It may, therefore, be laid down that a suitable negative for enlarging should have a sharp, well defined image all over, it should be full of detail in the shadows, should have a uniform tone, must be free from spots, pinholes, veilings or other imperfections, and must be of moderate density, with no thin or heavy patches. These points must be taken into consideration. Density is a very important quality. It must be remembered that the light has to pass through the negative before it reaches the sensitive material upon which the enlargement is to be made. So that, if the negative be dense, a prolonged exposure will have to be given or a more powerful light used to "throw out" the detail in the negative. This prolonged exposure would secure the detail in the high light, but it would most certainly block or clog the shadows. A thin negative, provided it has good detail, would give the better enlargement in such a case. A short exposure would have to be given and the light weakened, the development being forced to bring out the picture.

On the other hand a negative which will give a vigorous and very passable silver print does not always produce a good enlargement. Above all things the negative should be of even "quality" throughout, with no harsh contrasts.

In developing the negative intended to be used for enlarging purposes, it will be well to start with the assumption that all the detail must be brought out and density kept back.

Should the subject be wanting in contrast, or a full exposure have been given, it will be best to use a developer of normal strength and proceed carefully, applying the developer tentatively, taking care not to "flash out" the image. With a negative that has had the usual exposure, and with a subject that includes strong contrasts, the development must be modified in order to prevent hard contrasts in the negative, and as a consequence, black and white patches in the

enlargement. To secure the best result with such a negative, reduce the proportions of the developer, keep back the restrainer, and use the full quantity of accelerator. This will fetch out the detail and ensure a uniform colour or tone, and successfully prevent any tendency to block the high lights. In developing the negative, apply the solution gradually, and frequently examine the plate, during development, against the ruby light. So soon as the desired density is reached, stop development at once and place in the fixing bath. Mr. Wheeler, of Manchester, an authority upon enlarging, says in regard to the Development of the Negative:—When the Pyro Ammonia Developer is used, omit sulphite of soda altogether from the solution, as its tendency is to give clear glass and dense high lights at the expense of the half-tones. A uniform tone (although slightly brown) in the negative is almost a guarantee that it will produce an evenly-graded enlargement. The clear black and white negative may look pretty, but is deceptive. Continuing, he says:—Metol and Amidol developed negatives are usually excellent for enlarging purposes, especially when the illuminant is gas or oil. The blue grey image, in a fully exposed plate, is regular in its half-tones, is easily penetrated by the light, and there is freedom from fog or patches of irregular development. A stray white light appears to disperse or overwhelm the delicate details in the shadows, and in consequence should be avoided. Anyone who masters enlarging on Bromide paper may be able to get a very fair enlargement from a negative which may not be perfect. It is quite certain that more can be got out of the negative by carefully enlarging than by any other method. A dense negative, one that the light cannot penetrate through, is useless, and any attempt to do anything with such is time wasted and material thrown away.

We will suppose that we have a negative which is faulty, scratched, dotted with pinholes, or has some other objectionable features. These can be touched out before exposure. The markings must be carefully painted over with a non-actinic colour. These will possibly show on the enlargement, but when the print is completed, a soft crayon may be used, which will most successfully pencil out the patch or blot. It is quite possible to use water-colours on Bromide paper, and professional Photographers "work up" enlargements, taking great liberties with the photographic work, even to introducing whole backgrounds with the brush, picking out the trimmings, lace, jewellery, &c., this latter oftentimes being *introduced* or perhaps, we should say, "created" to please the vanity of the customer. Such work has to be done on the paper, but upon the negative much may be done. If for instance, the background is not considered suitable, the whole of it may be painted or blocked out, and with the help of a second negative, another introduced. Any part of the negative may be enlarged by masking; the rest—ugly objects in the foreground—may be dispensed with, the whole subject vignetted, and, in fact, with a little ingenuity, good picture enlargements may be secured from negatives, which, by reason of the defects already enumerated, would be useless for ordinary photographic printing. We do not, of course, advise the use of imperfect negatives, but it may be desirable, for instance, to copy



a photograph which has been taken many years, and is faded. In the Camera, get the best result and develop carefully. When complete, retouch the negative carefully and make an enlargement on Bromide paper. By this means it is possible to obtain a far better picture than by any other means.

We shall not deal more definitely with the question of the negative, but shall be glad to answer any questions upon the subject. Like everything else, if you have a good negative you are much more likely to get a good enlargement, but still no negative, except a very dense one, is hopeless.

In the next chapter we shall deal with enlarging on Bromide paper, taking first the making of the enlargement by daylight, and describing fully the apparatus, &c., required, and then proceed to the various methods of enlarging by artificial light and the several illuminants that may be required for that purpose.

(To be continued.)



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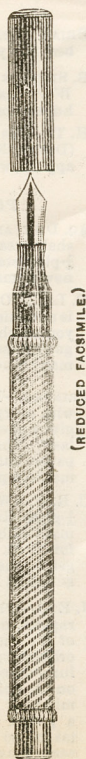
"Yes, if the fact is of any consequence, you are very welcome to say that I wrote the 'MANXMAN' with the Swan Fountain Pen. It has become quite indispensable to me. I can use it with ease and certainty anywhere, and at any time, even in the dark, in bed, and on horseback."

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## Photographic Hints for Amateurs.

### HYPO SOLUTION.

In making up a hypo solution take 2 ozs. and dissolve in water made up to 20 ozs., and do not add 2 ozs. of hypo to 20 ozs. of water.

### TO REDUCE PRINTING DENSITY.

When the negative is thoroughly dry, hold it for a moment under the water tap until the film is evenly wet, then set in the rack to dry. If upon drying it is still found too dense repeat the foregoing.

### ENLARGING FROM SMALL NEGATIVES.

In a recent issue of the *Kodak News* a very beautiful print from a negative exposed in a Pocket Kodak, taken by Mr. A. James, is given. An enlargement from the original negative, which measured 2 inches by 1½, has been reproduced, and it measures 7¼ inches by 5¼.

### DEVELOPERS.

Ammonia as an accelerator in development is fast becoming displaced by the more stable and more easily controlled soda. In the Ilford developing formula ammonia has long been discarded in favour of carbonate of soda. Ammonia is so volatile, and therefore liable to such variations in the strength, that those two reasons would appear to be amply sufficient to justify the change.

### DARK ROOM ILLUMINATION.

A writer in *Photographic Scraps* says in regard to the lighting of the dark room:—Daylight is so variable that its use brings with it two drawbacks: a difficulty in judging of density owing to the variation of light, and the risk of fog. . . . Artificial light is thus most advisable. Its special form must be decided on according to circumstances; gas, oil lamp, or candle are all available, and equally satisfactory under certain conditions. It is well to have the lamp outside the room if possible, in order that the fumes may not vitiate the air to the detriment of health and plates.

### AN AID TO MEMORY.

The Rev. F. C. Lambert, M.A., in a short note in the *British Journal Almanac*, sums up the following convenient headings, and advises these being written upon a sheet of cardboard thus:—

1. Camera.—Camera, case, spare front, sliding partitions, focussing cloth, straps.
2. Slides.—Slides, case.
3. Stand.—Legs, triangle, screw, straps, elastic bands (for umbrella, &c.).
4. Optical.—Each lens mentioned by maker's name, e.g., Ross' R.S. 12 in. bag, stops and case, cap, various adapter flanges, pin-hole apparatus, coloured glasses, &c.
5. Sundries.—Shutter, sky shade, spirit level, focussing glass, view meter, note books, addresses, guide books.
6. Changing.—Lamp, candles, orange paper, Turkey twill, drawing pins, dusting brush, number labels, wrapping papers—plates or films.





\*. All communications to be answered in these columns should be marked "Correspondence," and must be addressed to the Editor of *Hobbies*, Bouverie House, Salisbury Square, London, E.C. In no case can we reply to enquiries by post.

#### ELECTRICITY.

R. W. DEBENHAM.—We should like to see your model before we can give any answer to your letter.

W. S.—(1 and 2) The parts to make a quart-sized Leclanché cell would cost about 1/3 per cell, and may be obtained from any Electrical engineer. (3) Four cells may light a 1½ c. p. lamp for short periods.

TERMINAL.—It would not be advisable to substitute No. 86 for No. 88 S. C. wire; neither would it do to use No. 88 C. C., as this will not go sufficient turns to the inch. We advise you to stick to the No. 88 S. C., as the results are worth the additional cost.

ACCUMULATOR.—We cannot understand your accumulator not working properly. From the tone of your letter you appear to have made it correctly. Are you sure that your plates do not touch, or that there is no leakage between the cells. The plates are unusually thick. Gutta percha will sometimes shrink when laid in hot water.

R. CAREY.—We doubt whether you can obtain the materials from any one firm, but probably the Manager of our Supply Department could get them for you. The prices are appended:—4-cell Battery, 10/-; Accumulator, 5/-; Scarf Pin, 2/-; Button Hole, 2/3; Switch, 2/-; Reading Lamp, 2/6; Cigar Lighter, 2/6. The above consist of parts and materials.

D. D.—(1) The core of an induction coil should not be movable. You seem to have two separate cores; this is not right, the core should be wires all through. You should read the articles on the Induction Coil which appeared in *Hobbies*. (2) You may find a use for your coils shortly. (3) Leclanché cells are of very little use for such work. We may publish voltages, etc., of batteries some day.

#### FRETWORK, CARVING, &c.

G. A. SAVAGE.—Certainly you will not be disqualified by adopting the method you suggest for fixing the Victoria wheels.

NEW SUBSCRIBER.—We have seen a Fretwork model of "Big Ben," in white wood, and it looks remarkably well. The work is simple.

ALFRED WATERHOUSE.—Your Oak Bookshelf will look best if polished with beeswax and turps. A little "filling in" will be required. If you French polish the article, the dark polish which you have will do.

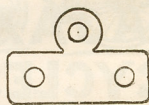
ELERKS DORP.—We do not think that Satin Walnut and Bird's Eye Maple would look well for the Card Receiver. The former is all right, but the latter being rather "spotty" would look dirty with this article. Try Satin Walnut and any white wood.

CHARLES WOOD.—We have your Wood Carving Design. The general idea is good, but your drawing is faulty, and the work would be too small and intricate for amateurs. We have already had a Design Competition, and, as we said at the time, none of the examples were of exceptional merit.

LOVER OF HOBBIES.—For the Brackets you refer to, at least three-sixteenth inch wood will be necessary. Walnut or Mahogany would be suitable. To fix the Mirror, you must plant a light framework at the back; the glass is placed within this, and a very thin piece of wood then laid over the back.

A. W. J. M.—1. The simplest method of fixing on the Victoria wheels is to take a couple of long wire nails and drive them carefully through the washers and wheel into the axle rod. The hole of the wheel should be rather easy, so that it may revolve freely. 2. You should certainly give Bent Iron Work a trial; it is a cheaper hobby than Fretwork.

BROWNIE (Battersea)—1. To hang the Bookshelves (Design No. 18) to wall, the best plan is to obtain four small brass Bracket Eyes (cost about 1d. each), and fix two of these to each shelf. A screw nail through each will then fasten securely to the wall. 2. To bevel the edges of Fretwork articles, what you require is a "Shooting" Board and Plane. The former costs about 2/-, and the latter, say 1/-.



Bracket Eye.

#### METAL WORK.

BRIAN BERA.—"Killed Spirits" (Chloride of Zinc) is the best flux you can use for soldering.

B. SIMPSON.—We have some more articles on *Bent Iron Work* ready, but have not had space to insert them. We hope to have one next week.

H. T.—It is not absolutely necessary to paint the Grill Panel (Design No. 14), but a coat of dead black paint, lightly applied, would greatly improve it.

#### PHOTOGRAPHY AND LANTERNS.

AQ. DIST. AND J. CLEGG.—In our Photographic articles we shall treat of the Hand Camera, and of course of the ½-plate stand Camera later on. We may give instructions now to make both.

E. L. L.—On page 499 of *Hobbies* a cheap ½-plate Camera is advertised which will come within your means. Have you no photographic dealer in your town? If you have, go and see him. Lancaster, Underwood, Fallowfield, and many other makers turn out good and cheap Cameras.

PRINTER.—You should follow closely the directions given with every packet of "Solio" paper, and use the formula given therewith, and not attempt to "try several formulas." The Photograph you send is not on "Solio" paper, but is carefully printed and toned on silver albumenised paper.

C. R. U.—We do not advise "outfits" for your purpose. A ½-plate Hand Camera would be best. A suitable instrument with finder dark slides, or magazine, can be bought for £22s. 0d. If you intend to take up platinum toning, get Lyonel Clark's book, 1s. All your questions will be answered in it. We cannot give the space here.

J. E. O.—Photographs by moonlight; it depends upon the rapidity of the plate, aperture of the lens, and brilliancy of the moon. It is not possible to take photographs by ordinary gaslight. With a regenerative burner, or the incandescent gas burner, it is possible to take a portrait on a quick plate, with an exposure of from 3 to 7 minutes; but with several incandescent gas burners and a proper arrangement of reflectors portraits may be taken, so far as exposure is concerned, practically in the same time as by daylight.



H. J. E.—Your Photographs have been returned. (No. 1) Here the lighting has been far too strong, and in order to successfully take a group you must, as far as possible, have the faces upon the same plane. The two first sitters are too near the lens. (2) Why huddle the boys up together? It is better than No. 1, but the boys have the sun in their eyes. It is not wise to photograph groups in strong sunlight. The picture would have been much improved had the group been more central on the plate. (3) Only the head of the poor animal is in focus. It is a very poor picture; such subjects are best left alone by the beginner. (4) This is a very poor print from an over-exposed negative. (5) You have attempted too much, the foreground is fearfully out of focus and the camera has been moved. Conclusions:—You are in too much of a hurry, the stains upon the prints prove this, and, further, that you are not careful in the dark room. We shall be pleased to see and criticise your future work.

## POULTRY.

T. E. G.—We expect that you will find the information you require in our series of articles on this subject.

## STAMPS.

W. E. E.—Used penny stamps of dates you mention are practically worthless.

G. B.—"Bright's A. B. C. Catalogue," just published, should suit your purpose as well as any.

TAMBA (Greenock)—The value of a 1d. Mulready envelope ranges from eight shillings to fifteen, according to condition.

J. W. T. (Huddersfield)—The Perak stamp, which is quite genuine, is worth 2d. The 17 cent, blue of Canada is worth 2/6.

W. H.—Your block of four Chinese stamps is interesting on account of the complete native postmark, but the value is 6d. at the most.

W. H. P.—One cannot possibly value such stamps as you mention without seeing them. Apart from the question of the date of issue, which in many cases you do not give, there is the matter of condition.

A. Mc. N. (Dublin)—The 2½ 1. English, blue, plate number 21, is worth 1d. The "Franco Bollo Postale" stamp, which belongs to the Papal States, or States of the Church, is worth 6d if used; if unused, it is probably a reprint. The Greece 5 lepta stamp is quite common.

A. M. (High Blantyre)—The higher values of the Columbus issue of U.S.A. stamps—that is to say, those above 80 cents.—are worth their face value, whether used or unused. The lower values are worth less than 6d. a piece.

## MISCELLANEOUS.

P. D. PRYOR.—We shall probably have a series of articles on Experimental and Analytical Chemistry in Vol. 2.

GEO. CARPENTER AND A. A. E.—The second volume of *Hobbies*, which begins on April 18th, will have a cover.

A. B.—"How to use Chinese Ink?" Take a saucer with a few drops of water in it, and rub the end of the stick firmly in it till a good density is secured. Use a small camel hair brush when applying the ink to the pen.

J. G.—The term 12mo. (Duodecimo) is the name given to a certain division of a sheet of paper for Book-printing. The size of page varies according to the paper used, thus:—Foolscap, 3½ by 5½; Crown, 3½ by 6½; Demy, 4½ by 7½, and Royal 5 by 8½.

Y. Z.—"Whatman's" is a specially prepared drawing paper, and the most useful for general purposes. It is supplied in three surfaces,—*Hot-pressed*, *Not pressed*, and *Rough*. The first named is for pencil or ink, the second for ordinary colour work, and the third for bold sketching. It can be had in the usual sizes.

JUNIOR MED.—A Tenor Trombone is not so easy to blow as you imagine. If you object to flutes and flageolets, why not try a clarinet? It would be more suitable for the drawing room than a trombone or bassoon. An oboe might perhaps be in your line, but you do not say whether you wish the instrument for solo or orchestral playing.

F. C. D.—It will not be possible to remove the yellow stain that the handle of your walking stick has acquired. All ivory yellows with age. Possibly you might get a whiter surface by scouring with emery powder and repolishing, but in all probability you would spoil the handle. We should advise you to leave it alone. A yellow tint in ivory is like a man's grey hair—honourable.

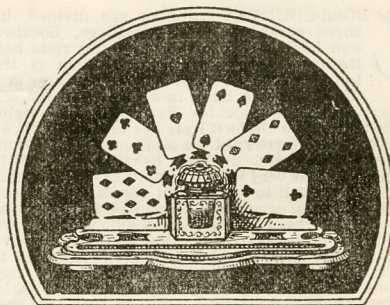
J. B. HECTOR.—If you intend to adopt Electrical Engineering as a profession, mechanical engineering will be a branch that you will have to go through during your apprenticeship, and the length of time will depend upon the efficiency you maintain, and the class of work the firm you are apprenticed to turn out. The term may be anything from three to seven years. You will have to decide what branch you take up—Lighting, Traction, Telegraphy, Tel-phonic, Signalling, &c., &c.

# 'Hobbies' Designs.



WING to the very heavy expense involved in the production of the Designs forming our Weekly Presentation Supplements, we cannot supply these with back numbers of *Hobbies*. Copies of them may, however, be obtained on sending *threepence* for each Design required to the Publisher of *Hobbies*, Bouverie House, Salisbury Square, London, E.C.

For the convenience of our readers we give below a complete list of the Designs already published.



No. 5. CARD INKSTAND.

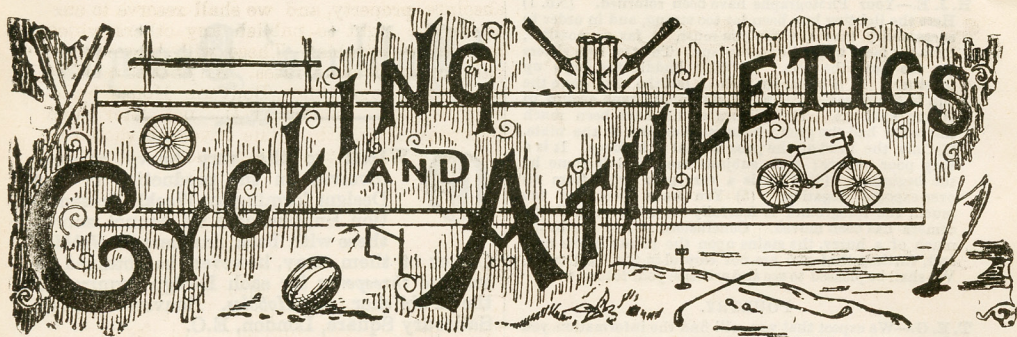
1. Midget Photo Frame, with Overlay Ornament.
2. "Aphrodite" Mirror Bracket.
3. Bent Iron Work Gong Stand.
4. Hanging Twine Box, with Overlay Ornament.
5. "Card" Inkstand.
6. Carved Adams Frame.
7. "Gasalier" Bracket.
8. Bent Iron Work Table Stand, for Cards, etc.
9. Carved Lamp Bracket.
10. Model of a Victoria.
11. "Toilet Glass" Cabinet Photo Frame.
12. "Swing-Boat" Match Holder.
13. Hanging Fretwork Calendar.
14. Bent Iron Work Grill Panel.
15. Carved Blotting Book Cover.
16. Prize Card Receiver.
17. Panel with Overlaid Ornaments.
18. Bookshelves.
19. Two Stencil Dado Bands.
20. Gong Stand.
21. Two C. D. V. Photo Frames.
22. Pipe Rack, with Mirror Back
23. Model of a Polo Cart.

The following Designs are in preparation—

24. Swing Letter Holder.
25. Bent Iron Work Wall Mirror.

NOTE.—The Patterns not otherwise designated are Fretwork.





## NOTES ON SPORT.

CROSS-COUNTRY runners are divided into three great divisions—Northern, Southern, and Midland. Each of these districts holds its own championship race, which is then followed by the "National." The three great division races have now been decided, with the result that the Finchley Harriers are champions of the South, the Salford Harriers of the North, and the Birchfield Harriers of the Midlands. All produced interesting contests. In both North and South the competition was very keen, and neither of the winning teams had much to spare. In the Midlands cross-country running occupies nothing like the position it once did, and there are but few teams with any pretensions to first-class form. One of these, however, the Birchfield Harriers, of Birmingham, provides the brilliant exception, as this club has won more national championships than any other organisation. So strong have the Birchfield runners been that there has been no Midland championship race for some years until this season, when the event was decided near Worcester. Once more the champions had it all their own way, their men finishing third, fourth, fifth, seventh, ninth, and tenth. Six men in the first ten left no doubt as to the result of the calculations. When the figures of the race were gone into, it was found that the Birchfield team had not only won, but that had all their opponents been representing one united club, instead of three different ones, the Birchfield would have won still. Worcester Harriers were second, Northampton third. The Birchfield have no individually brilliant runner, but the strength of the team lies in the fact that it is almost impossible to say which is the best and which the worst man in it. In the Midland race the sixth Birchfielder passed the judge in less than one minute after the first of the team had finished, and this in an eight or nine mile course.

The great cross-country event of the year, the National Championship Race, was decided in the Birmingham district on Saturday, the 7th, at Minworth, and the course was a circular one, about 3½ miles in extent, and this had to be covered three times. There was plenty of heavy going, especially "plough," and the drenching rain which fell for several hours prior to the decision of the event made the running very hard work indeed. The competition was very close between the leading clubs, but Salford Harriers secured first place with 116 points, Birchfield Harriers the holders, coming in a very close second with 121. The Manchester Harriers had the satisfaction of seeing two of their men finish first and second in the race, G. Crossland, who was all along fancied to win, entirely justifying the expectations of his friends, but the Manchester team was weak in the tail and made no show. Essex Beagles were well up with their first five men, and with a better sixth man might have won. The Finchley Harriers, winners of the Southern Championship, were never prominent. There was a protest against W. H. Morton, the first man home for the winning team, and the fourth in the race. Had this protest been upheld the Birchfield Harriers would have taken first place. The wretched weather was accountable for the poor gate, only about 1,000 spectators braving the elements in order to witness the sport.

Football form is always more or less uncertain, but under Rugby rules we have had this year some

very curious results, to some of which we have alluded on previous occasions. The complete slaughter of Blackheath by Cardiff is the latest among remarkable reversals of form. England it will be remembered simply walked over Wales a few weeks ago. Blackheath is perhaps the strongest English team, and yet Cardiff has now beaten the crack London club by no less than six tries to nothing. It is true that Blackheath were weak, but Cardiff was also minus some of her best men. Under any circumstances it is a wonderful performance for any club to cross Blackheath's line six times in one match.

Moseley, the crack Midland team, also ran up a tremendous score on the same day, beating Edgbaston Crusaders by six goals and one try to nil. Byrne, the Moseley captain and International back, converted four tries into the major point out of five attempts. Those who are always telling us that professional football has had its day will perhaps be interested in hearing that close upon £2,000 was taken in four cup-tie matches on a wet Saturday afternoon a few days ago.

All interest is now centred on the "Cup." Everyone knows, of course, who knows anything about football, that the League system of finding out which is the strongest team is infinitely the most satisfactory, but for all this there is a certain glamour about the English Cup which, for the time, at any rate, renders the competition for that trophy more popular even than the great fights in the League matches.

The Cup contests being decided on the "knock-out" system, the element of luck naturally enters into the proceedings, but this by no means detracts from the interest, in fact, it is doubtful if it does not actually increase it. If we take the League results as a sure basis to work upon, we find that the four clubs now left in for the semi-final stage of the English Cup are not the four strongest. For instance, Aston Villa, which is well ahead at the very top of the League is not among the four. Of the four teams referred to Derby County is second in the League, Bolton Wanderers fifth, Sheffield Wednesday sixth, and Wolverhampton Wanderers fourteenth. On one occasion the West Bromwich Albion won the English Cup when they were at the very bottom of the 16 clubs which constitute the League.

Skating still goes on, although, of course, not in this country. Some wonderful performances at speed work on the ice have, however, been recently accomplished elsewhere. In the Championships of Canada, 220 yards were covered in 20.4-5th seconds, which is faster than the fastest sprint running, while the same skater beat the half-mile record the same day by covering that distance in the extraordinary time of 1 min. 20.2-5th secs. An even more wonderful short distance performance is reported from Minnesota, where, on a small track six laps to the mile, a man is said to have covered a quarter of a mile in 39.1-5th secs. We should very much doubt the correctness of this. How the turns, on a small course only 300 yards in circuit, could be negotiated at a speed of about 23 miles an hour, it is impossible to say. Another Minnesota man is said to have "jumped" 21 feet 3 inches on skates. Another record.



# PRIZE Competitions

## Lantern Slides.—Result.

This Competition has not been quite as successful as we had hoped, still the Slides received are of excellent quality and show that amongst readers of *Hobbies* there are many good Lantern Slide makers.

FIRST PRIZE (Ten Shillings).—E. Brightman, 61, Redland Road, Bristol.

SECOND PRIZE (Five Shillings).—F. M. Thomson, 22, Avenue Road, Southampton.

HON. MENTION.—R. W. Copeman and T. Lee Lloyd.

Mr. Brightman's Slides include a view of the "West Front of Wells Cathedral," "Cottage at Selworthy," and a very beautiful seascape with cloud effect—"Stranded." These Slides are equal to any that have come under our notice. Mr. Thomson's work is also of great merit. His subjects are:—"University Galleries, Oxford," "A Misty Morning," a Barge on the Solent with a mist on the water; the effect is admirable, and it is perhaps the best of his set. The best Slide sent by Mr. Copeman is—"On the Stour, Blandford." Mr. T. Lee Lloyd has an excellent Slide in his "Interior, Salisbury Cathedral, looking West." Other Competitors whose work is of a high standard are Messrs. G. H. J. Burrows, G. T. Hardman, and Joe Firth.

## Another Competition for Everyone.

Our recent "Suggestions" Competition was so unexpectedly successful that we have decided to institute another, which will, in the same way, be open to all our readers of both sexes. We therefore offer a PRIZE of ONE GUINEA for the best, and one of HALF-A-GUINEA for the second best, description of how to make any article intended for either use or ornament. The descriptions sent may be just as short as desired, but they must not in any case exceed one thousand words. Where illustrations are necessary to make the explanations clear, sketches of either a rough or finished character should be sent. We place absolutely no restrictions upon the choice of subject, and the article described may be of wood, metal, cardboard, silk, wool, or paper, or, in fact, of any material that may be preferred. It is desirable that the articles described should, if possible, be of a novel character, and the descriptions must be thoroughly clear and practical. The Competitors cannot, indeed, have better models than the short articles which have appeared in *Hobbies*, such for example as that on "How to Make an Imitation Marble Chess Board," in No. 20, or that on "How to Make a Folding Bookshelf," in No. 4. We cannot undertake to return any manuscript sent, even if stamps be enclosed for the purpose. The descriptions to which the prizes are awarded will be our

absolute property, and we shall reserve to ourselves the right to publish any others which may seem suitable. These will, however, be paid for at our usual rates. All entries must be received at our Office, Bouverie House, Salisbury Square, London, E.C., not later than Saturday, April 4th. The envelopes should be marked "Description Competition."

## Photography.

Every month we give a prize of TEN SHILLINGS for the best PHOTOGRAPH, and FIVE SHILLINGS for the second best. Subject for this month—"Landscape and Seascape." The print may be by any process, and from any sized negative up to "whole plate." Photographs cannot be returned, and we reserve the right to reproduce any of them in *Hobbies* if thought desirable. Photographs for this Competition must be sent to our office not later than March 31st, marked "Photograph."

The result of the February Competition will be found on another page.

## Bent Iron Work.

For the best BENT IRON WORK GRILLS, made from Presentation Design No. 14, we offer one Prize of a GUINEA, and one Prize of HALF-A-GUINEA.

Articles should be marked "Grill," and must be received at our Office not later than March 31st.

## Fretwork.

For the best FRETWORK MODEL of a VICTORIA, made from the Design presented with *Hobbies* No. 10, we offer Two Prizes:—

First Prize—An "IMPERIAL" TREADLE FRETSAW, with Superior Tilting Table for Inlay Work, Vertical Drilling Attachment, and all Modern Improvements.

Second Prize—A Finely Finished Treadle Fret-saw, with Nickel-plated Tilting Table, Emery Wheel, etc.

All Articles sent in for Competition should be marked "Victoria," and must be received at our office not later than March 31st.

## Wood Carving.

For the best CARVED BLOTTER BOOK COVERS, made from Presentation Design No. 15, we offer Two Prizes:—

First Prize—ONE GUINEA.

Second Prize—SET OF TWELVE SUPERIOR CARVING TOOLS.

Articles should be marked "Blotter," and must be received at our office not later than April 30th.

## Notice to Competitors.

All Articles, Sketches, etc., for Competition should be addressed to the Editor of *Hobbies*, Bouverie House, Salisbury Square, London, E.C. The name and full address of Competitor must in every case be sent.

NOTE:—No correspondence can be entered into with Competitors, and all awards made will be final.



# FOR Sale, and Exchange.

\*. The charges for advertisements (prepaid) in this page will be sixpence for every twelve words or less, name and address inclusive, and one halfpenny for every additional word. Single letters, initials, and figures are each counted as a word; but undivided numbers (as 152), and prices (as 10s. 6d.) count as only one word each. In every case the name and address of the advertiser must be given for publication, and we cannot at present undertake to supply a private name or number and receive replies to advertisements at our office. All advertisements must be accompanied by remittances, otherwise they cannot be inserted. Whenever possible, payment should be made in Postal Orders, and not stamps. Letters should be marked "Advt.," and must be addressed to the Publisher, *Hobbies*, Bouverie House, Salisbury Square, London, E.C.

NOTE.—Trade Advertisements can only be inserted in this page at the rate of one shilling per line.

**Acme Electric Bell Set**, comprising 2½ in. Electric Bell, Quart Leclanche Battery, Push, 50 feet Wire, Staples, Instructions, 4/6; better value impossible.—Electric, Lord Street, Openshaw, Manchester. H. 4.

**Bagatelle Board**.—Cloth unsoiled, 9 ft. by 2½, 3 billiard cues, 8 ivory balls, complete, 30/—F. Bryant, 15, Bishop's Road, Highgate.

**Boys' Own Paper**.—5 volumes, monthly parts, no plates. Exchange good Fretsaw Machine or offers.—T. Turnbull, Foundry Fields, Crook, Durham.

**Edison Phonograph for Sale or Exchange**, hand driven, 8 records, 7 listening tubes, &c. What offers?—James, 73, Acklan Road, London, W.

**Electrical Hobbies**.—How to fit up an Electric Bell Set, make a Motor, and make a Shocking Coil. Separate illustrated instructions, free with list, 2d.—Electric, Lord Street, Openshaw, Manchester. F. 5.

**Electric Lamps**, 2-volt, 6d., three for 1/3; Lamp-holders, 4d.; Reflectors, 3d.; 4-volt Pocket Accumulators, improved system, 5/6.—Whitling, 109, Fore Street, E.C. D. 1.

**Free**.—Pocket Rubber Stamp of your Name and Address; also particulars of the best paying Agency going for whole or spare time.—Richforde's Company, Snow Hill, London. D. 1.

**Foreign Stamps**.—Sheets on approval. Low prices. Liberal discount. Reference or deposit required.—Phoenix Stamp Company, 31, Radnor Street, Peckham.

**For Sale**, Roger Fret Machine (new January), 13/-, or offers.—Williamson, Lincoln Street, Wakefield.

**Fretwork, Carving, Marquetry**, Lists 48-56, 1d.; *The Amateur*, vols. 1 to 5, 1/- per vol.—Henry Zilles & Co., Importers of German Designs, Wilson Street, Finsbury, London.

**Gramophone Talking Machine**, as new, with Records, Gurtubes, Trumpet, &c, 16/-, cost £2 2s. Two splendid ½-plate Rapid Rectilinear Iris Diaphragm Lens, Nickel Mount, 12/- each. Lantern, complete, Lecturer's, 18/- Slides, 1/9 set of 12 coloured. Field Glass, Eight Lens, in sling case, 8/6, as new.—Fowler, 70, Gt. Safron Hill, London.

**Hand Camera for Sale**, 10/6, almost new, ½-plate.—Apply, F. Bates, 31, St. Leonard's Avenue, Bedford.

**How to make an Electric Night Light** that will work well for years without attention, post free, 6 stamps; also how to attach an electric alarm to a clock, 6 stamps.—James, 11, Stanbury Road, Peckham, S.E. C. 2.

**How to learn and start a light artistic business** that will produce a living without previous knowledge on the small capital of one pound. Complete instructions, post free, 12 stamps.—James, 11, Stanbury Road, Peckham, S.E. C. 2.

**Join the Rapid Stamp Exchange**.—For Rules, apply Cooke, Hick Street, Birmingham. B. 1.

**Lantern Slides**, made from your own negatives, 12/- dozen. Write for list, free. Every slide individually tested.—E. H. Veitch, 58, North Road, Durham.

**New Book of Instructions** in gilding, graining, mixing paint, French polishing, picture-frame making, mount cutting, etc., 1,000 valuable recipes, free, 1/2.—McQuhae, Cockermouth, and all Booksellers. L. 12.

**Old English Stamps**! Wanted, any values; also current issue, above 1d.—Gait, 17, Bailey Road, Portsmouth. B. 2.

**Only 5d.**—70 different Stamps from 30 different Countries.—Dew, 12, Shirley Gardens, Hanwell.

**Select Home School for Girls**.—Daughter of professional man, experienced in teaching, residing in healthy Wiltshire town, has vacancies for one or two boarders.—Miss Keeling, Chequer, Devizes.

**Solid-tyred Bicycles** from 12/6; Cushions from 25/-; Pneumatics from £3 10s.—Lund, Cycle Agent, Bradford. See our Fretwork Advt. in No. 20. B. 1.

**Special Advantage to Amateurs**.—Best Stains on the Market. All Woodworkers should send stamped address for prices to Waste, 121, Lomax Street, Rochdale.

**Stamps**.—Gratis, a set of Montenegro to all applicants for my well-selected approval sheets; suit all collectors. Agents wanted to sell from sheets, good commission.—John Davey, Messing, Kelvedon.

**Stamps**.—30 British Colonies, etc., 31. Sheets sent on approval.—Hillier, Cliftonville, Margate.

**Stamps**.—Free, 20 different United States to all applicants for sheets, enclosing postage; 100 different Stamps, 5d.—Rhodes, Rammas House, Otley.

**Stamps**.—1,500 different in good Lincoln album, price £2 15s. Splendid start for beginner. References, approval; also 200 good duplicates, 2/-; 100, 9d.—Derham, 17, Zinzan St., Reading.

**Stamps**.—25 varieties, post free, 7d.—Maxwell Mortimer, 71, Gurney St., Watworth.

**Wanted**, every reader of *Hobbies* to send 1/- for one of our Pocket Knives (2 blades), free with our lists; do not delay.—Electric, Lord St., Openshaw, Manchester. D. 3.

**Wanted**, for cash, old English Postage Stamps, used, unused, and "Specimen," all values.—Kerr, 4, Hillside Street, Edinburgh. B. 2.

**30 Picked Stamps**, Mauritius, Hayti, Sirmoor, Travancore, no European, 7d., free.—Campbell, Ingles & Co., Carlisle.

\*. As we are obliged to go to press about ten days before the nominal date of publication, Advertisements must be received at our Office on Wednesday morning to ensure insertion in the following week's issue.

## £20

**TOBACCONISTS COMMENCING.** See Illd. Guide & Catalogue (359 pgs.) 6d., "How to open a Cigar Store £20 to £3,000."—Tobacconists' Outfitting Co. (Reg.), 186, Euston Rd., London. N.B.—Shopfitters and showcase makers for all trades. (Over 50 years reputation.) Mgr., H. Myers.



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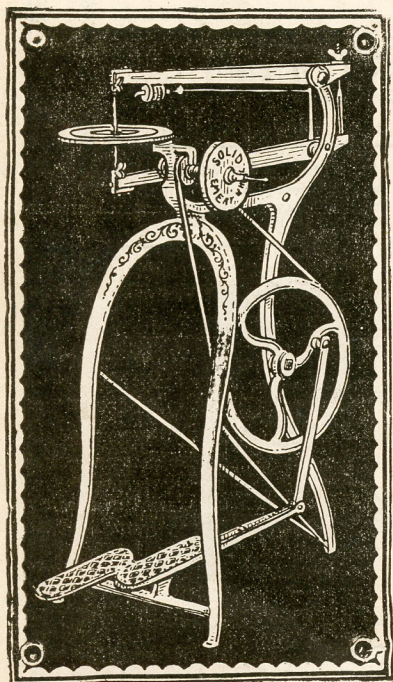
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# Special Offer to Clear Stock!

\*\*. As the close of the season is at hand we wish as far as possible to clear our Stock of Treadle Fretwork Machines, and we therefore make a Special offer which will hold good until the end of March. With every Improved Roger Fretsaw we will give away a SIX-FOOT PARCEL OF ASSORTED PLANED FRETWOOD, and with every Companion, Goodell, and Imperial Machine we will give a TWELVE-FOOT PARCEL OF ASSORTED PLANED FRETWOOD. All these Machines are made in our own Workshops, and may be thoroughly depended upon to do good work.

## THE IMPROVED "ROGER" FRETSAW



The Improved "Roger" Fretsaw.

With Drill, Blower, Fly Wheel,  
Emery Wheel, etc.

These Machines are made entirely in our own workshops, and we strongly recommend them as being thoroughly serviceable and reliable. Although offered at an exceptionally low price, they are of the very best quality and finish. The arms have a clear swing of 18 inches, thus enabling a large piece of work to be cut, and the clamps are hung on pivots and will hold any size of saw. The Tilting Table may readily be adjusted to any angle for Inlaying. The Machines are made by experienced workmen, and all material used is of the best quality. Each one is provided with Drill Spindle, Dust Blower, Fly Wheel, and all accessories.

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